## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of claims:**

1. (Currently Amended) An in-vitro blood plasma lipids filtering method, comprising the following steps:

collecting blood from a patient by a blood collecting device;

- separating blood plasma from the collected blood by a blood separating device connected to the blood collecting device, wherein the separated blood plasma enters a pre-filtered blood plasma bag which includes an automatic weight or volume detection device for transmitting a signal that triggers a stop response to the blood separating device or the blood collecting device when the pre-filtered blood plasma bag is full;
- device with saline solution from a saline solution treatment bag connected to an outlet of the pre-filtered blood plasma bag, wherein the flushed saline solution from the blood plasma lipids filtering device flows into a waste saline solution bag connected to the blood plasma lipids filtering device;
- controlling temperature and pressure of the separated blood plasma from the pre-filtered blood plasma bag by a pressure control device connected to the pre-filtered blood plasma bag;
- passing the <u>separated</u> blood plasma tothrough the blood plasma lipids filtering device for filtering out lipids of the separated blood plasma, wherein the blood plasma lipids filtering device comprises multi-layers of thin film membranes of which at least a first film is a membrane having filter aperture pores of about 0.3 to 0.65 microns and comprises a lipid absorptive material for filtering out lipids of the separated blood

plasma, a second film is a membrane that has filter aperture pores of about 0.3 microns for filtering out bacterium and chyle-lipoprotein, and a third film is a membrane that has filter aperture pore of about 0.2 microns and comprises nylon as a base material for filtering out foreign particles generated from the first and second filtering processes, wherein the foreign particles include thin film wood-pulp material or adsorptive particles; and

- collecting the filtered blood plasma by a post-filtered blood plasma bag connected to the blood plasma lipids filtering device;
- controlling the temperature of the filtered blood plasma from the post-filtered blood plasma bag by a temperature control device connected to the post-filtered blood plasma bag; and feeding the filtered blood plasma back to the blood of the patient by a blood plasma feedback device connected to the temperature control deviceafter the filtering step.
- 2. (Currently Amended) The method as claimed in Claim 1, wherein the separating step comprises a stepwise separation process for separating the <u>collected</u> blood plasma <u>from the blood collecting device</u> at about 150-250 milliliters of <u>the blood plasma</u> each time.
- 3. (Currently Amended) The method as claimed in Claim 1, wherein the separated blood plasma passes to the blood plasma lipids filtering device at a speed of 20-30 milliliters per minute, and the speed is controlled by a peristaltic pump connected to the pre-filtered blood plasma bag and the pressure control device.
- 4. (Currently Amended) The method as claimed in Claim 1, wherein in the <u>blood plasma</u> <u>lipids</u> filtering device, <u>the pressure is controlled below 60KPa by the pressure control device</u>.
- 5. (Currently Amended) The method as claimed in Claim 1 further comprising a step of making controlling the temperature of the <u>filtered</u> blood plasma <u>from the post-filtered blood</u> <u>plasma bag approximately equal to body temperature by the temperature control device</u>.
  - 6. (Cancelled)
- 7. (Currently Amended) The method as claimed in Claim **61**, wherein at least one <u>additional</u> first film of multi-layers of thin film membranes is further interposed between the second and third

films.

- 8. (Currently Amended) The method as claimed in Claim 61 or 7, wherein the lipid absorptive material of the first film comprises silicon oxide pellets.
- 9. (Currently Amended) An in-vitro blood plasma lipids filtering device apparatus comprising:
  - a blood collecting device, adapted to for collecting blood from a patient;
  - a blood separating device that connected to the blood collecting device for separatesing the blood plasma from the blood collected by the blood collecting device by centrifugal separation;
  - a pre-filtered blood plasma bag <u>connected to the blood separating devicethat has an outlet</u> <u>connected to the saline solution treatment bag</u> and <u>containing including</u> an automatic weight <u>lor</u> volume detection device for transmitting a signal that triggers a stop response to the blood separating device <u>andor</u> the blood collecting device when the <u>pre-filtered</u> blood plasma bag is full;
  - a peristaltic pump connected to the pre-filtered blood plasma bag for producing flowing power for the separated blood plasma;
  - a pressure control device connected to the peristaltic pump for controlling the pressure of the separated blood plasma by adjusting the rotational speed of the peristaltic pump;
  - a blood lipids filtering device <u>connected to the pressure control device for that receives the separated blood plasma</u> and filtersing <u>out lipids of the separated blood plasma and further comprising a saline solution treatment bag and a waste saline solution bag, wherein the blood plasma lipids filtering device comprises multi-layers of thin film membranes of which at least a first film is a membrane having filter aperture pores of about 0.3 to 0.65 microns and comprises a lipid absorptive material for filtering out lipids of the separated blood plasma, a second film is a membrane that has filter aperture pores of about 0.3 microns for filtering out bacterium and chyle-lipoprotein, and a third film is a membrane that has filter aperture pore of about 0.2 microns and comprises</u>

- nylon as a base material for filtering out foreign particles generated from the first and second filtering processes, wherein the foreign particles include thin film wood-pulp material or adsorptive particles;
- a post-filtered blood plasma bag connected to the blood plasma lipids filtering device for collecting the filtered blood plasma; and
- a temperature control device connected to the post-filtered blood plasma bag for controlling the temperature of the filtered blood plasma from the post-filtered blood plasma bag; and
- a blood plasma feedback device, which is connected via tubes to a peristaltic pump, pressure and the temperature control devices being installed among the tubes for feeding the filtered blood plasma back into the blood of the patient,

the in-vitro blood plasma lipids filtering device apparatus further comprising:

- a saline solution treatment bag connected to an outlet of the pre-filtered blood plasma bag for providing saline solution to flush the blood plasma lipids filtering device before the blood lipids filtering device filters out lipids of the separated blood plasma; and
- a waste saline solution bag, wherein the saline solution treatment bag being connected to an outlet of the pre-filtered blood plasma bag, and the waste saline solution bag being connected to an entrance-inlet of the post-filtered blood plasma bag for collecting the flushed saline solution from the blood plasma lipids filtering device during flushing the blood plasma lipids filtering device.
  - 10. (Cancelled)
- 11. (Currently Amended) The in-vitro blood plasma lipids filtering device apparatus as claimed in Claim 9, wherein the pre-filtered blood plasma bag has a volume of about 150-250 milliliters.
- 12. (Currently Amended) The in-vitro blood plasma lipids filtering device apparatus as claimed in Claim 9, wherein the pressure control device indicates a current pressure value inside the tube and can control the rotational speed of the peristaltic pump.
  - 13. (Currently Amended) The in-vitro blood plasma lipids filtering device-apparatus as

claimed in Claim 9, wherein the peristaltic pump is controlled to have <u>athe</u> rotational speed that induces a flow rate of the <u>separated</u> blood plasma at about 20-30 milliliters every minute.

- 14. (Currently Amended) The in-vitro blood plasma lipids filtering device apparatus as claimed in Claim 9, wherein the pressure control device controls the pressure to be below 60KPa.
- 15. (Currently Amended) The in-vitro blood plasma lipids filtering device apparatus as claimed in Claim 9, wherein the temperature control device is installed in the screening procedure used to maintain a constant temperature of the blood plasma.
- 16. (Currently Amended) The in-vitro blood plasma lipids filtering device apparatus as claimed in Claim 9, wherein the temperature control device is operable to have a highest heating temperature at 38°C.
  - 17. (Cancelled)
- 18. (Currently Amended) The in-vitro blood plasma lipids filtering device apparatus as claimed in Claim **179**, wherein at least one additional first film of a multi-layers of thin-film membranes is further interposed between the second and third films.
- 19. (Currently Amended) The in-vitro blood plasma liquids filtering <u>device-apparatus</u> as claimed in Claim <u>179</u> or <u>18</u>, wherein the lipid absorptive material <u>of the first film</u> comprises silicon oxide pellets.